

Remarks

After the foregoing amendment, Claims 1-9, 11-21 and 23-33 are pending. Claims 1, 2, 7, 11, 13, 17, 18, 25 and 26 have been amended. Claims 10 and 22 have been withdrawn. Claims 32 and 33 are new.

Claim Rejections 35 USC § 112

Claims 10-11 and 22 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Claim 11 has been amended to comply with 35 U.S.C. 112 as it is supported by paragraph 22 of the specification. Claim 10 and 22 have been withdrawn. Based on the foregoing amendments claims 11 is in condition for allowance.

Claim 18 stands rejected under 35 U.S.C. 112, second paragraph. This claim has been amended to replace “digitized bioelectric signal” with “EEG signal” and as such currently has antecedent basis and is in condition for allowance.

Claim 13 and 25 stand objected to since they do not define BCI. Claims 13 and 25 have been amended to specifically state “brain/computer interface” rather than the abbreviation and as such are in condition for allowance.

Claim Rejections 35 USC § 102

Claims 1, 4, 5, 7, 15 and 16 stand rejected under 35 U.S.C. 102 in light of being anticipated by Knispel (US Patent 4883067). Claim 1 has been amended to differentiate it from Knispel in that the disclosed invention is a method for adaptive intervention for effecting persistent changes in the cognitive-emotive profile. This present invention does not merely acquire a plurality of bioelectric signals to determine a cognitive emotive profile and then map them onto a set of commands. Instead this invention acquires bioelectric signals of a subject and

compares them to the subject's current psychological state to extract a multi-dimensional cognitive-emotive profile (*see claim 1 and specification paragraph 20*). This cognitive-emotive profile is then mapped into a set of commands which are delivered to the brain to drive therapeutic and non-therapeutic stimulus thus effecting a prolonged change in the individual's cognitive-emotive profile (*see claim 1 and specification paragraph 15 & 33*.) Knispel does not disclose or teach a method whereby the cognitive-emotive profile is mapped onto a set of commands and these commands are delivered back to the individual to drive therapeutic and non-therapeutic stimulus intervention to effect a prolonged change in the individual's cognitive-emotive profile. Claims 4, 5, 7, 15 and 16 depend from claim 1 which is not anticipated by Knispel and as such these claims are in condition for allowance.

Claim Rejections 35 USC § 103

Claims 2, 3, 17-20, 23, and 27-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Knispel in view of Epstein (US Patent 6132361).

As to claims 2 and 3 Knispel in view of Epstein do not make obvious the instant invention as the instant invention teaches a method for creating commands which are generated to the brain to drive therapeutic and non-therapeutic stimulus to effect a prolonged change in the individual's cognitive-emotive profile. Neither Knispel nor Epstein alone or in combination teach this technique. Epstein does not use transcranial magnetic stimulation ("TMS") to as commands to the individual to drive therapeutic and non-therapeutic stimulus intervention (*see claim 1*). Furthermore, Epstein does not use TMS to effect prolonged changes such as improved memory function or reduction or elimination of symptoms of an illness (*see claim 1, 32 and specification ¶8*).

As to claim 17 Knispel teaches away from the claimed invention in that Knispel uses musical feedback via an audio signal as a means to deliver brain stimulation. As well known, musical signals are communicated in the audio spectrum. As a means to affect brain stimulation, Knispel must necessarily depend on the ability of the subject to hear the audio signals. This requirement is not present in the instant invention.

Further there is no teaching in Knispel as to how to convert musical audio signals into electronic signals to effect brain stimulation. In that connection, the combination of Knispel and Epstein is inappropriate. Neither Knispel nor Epstein disclose an invention which effects persistent changes to the cognitive emotive profile. Claims 18, 19, 20, 23, 28, 29, 30 and 31 all depend from independent claim 17 which discloses an invention which is novel and non obvious in light of Knispel and Epstein and as such are in condition for allowance.

Conclusion

Based on the forgoing amendments and remarks this applicant respectfully requests that this patent be allowed for issuance. If the Examiner has any questions or comments regarding the above Amendments and Remarks, the Examiner is respectfully urged to contact the undersigned at the number listed below.

Respectfully submitted,

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